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PTO/SB/61 (09-04)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
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**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT  
ABANDONED UNAVOIDABLY UNDER 37 CFR 1.137(a)**

Docket Number (Optional)

First Named Inventor: Kyle Broussard  
Application Number: 10/662487  
Filed: 09/15/2003

Art Unit: 3617  
Examiner: Wright, Andrew

Title: Method and apparatus for Air cooled Outboard Motor for  
Small Marine Craft

Attention: Office of Petitions  
Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NOTE: If information or assistance is needed in completing this form, please contact  
Petitions Information at (703) 305-9282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus any extensions of time actually obtained.

**APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION.**

NOTE: A grantable petition requires the following items:

- (1) Petition fee.
- (2) Reply and/or issue fee.
- (3) Terminal disclaimer with disclaimer fee-required for all utility and plant applications filed before June 8, 1995, and for all design applications; and
- (4) Adequate showing of the cause of unavoidable delay.

**1. Petition fee**

☒ Small entity - fee \$250.00 (37 CFR 1.17(l)). Applicant claims small entity status.  
See 37 CFR 1.27.

☐ Other than small entity - fee \$ (37 CFR 1.17(l)).

**2. Reply and/or fee**

A The reply and/or fee to the above-noted Office action in the form of  
Petition for Revival of Unavoid. (Identify the type of reply):

☐ has been filed previously on

☒ is enclosed herewith.

B The issue fee of \$

☐ has been filed previously on

☐ is enclosed herewith.

[Page 1 of 3]

This collection of information is required by 37 CFR 1.137(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

07/07/2005 TBESHAH1 00000060 10662487

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# **PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNAVOIDABLY UNDER 37 CFR 1.137(a)**

## 3. Terminal disclaimer with disclaimer fee

- ☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

## 4. An adequate showing of the cause of the delay, and that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition under 37 CFR 1.137(a) was unavoidable, is enclosed.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

Robert N. Montgomery  
Signature

7-1-2005  
Date

Robert N. Montgomery  
Typed or printed name

35,291  
Registration Number, if applicable

109 Brownlee Ave.  
Address

337+837+4042  
Telephone Number

Broussard, LA 70518  
Address

Enclosure ☒ Fee Payment

☒ Reply

☐ Terminal Disclaimer Form

☒ Additional sheets containing statements establishing unavoidable delay

☐ \_\_\_\_\_

## **CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(a))**

I hereby certify that this correspondence is being:

☒ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to **Mail Stop Petition**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

7-1-2005  
Date

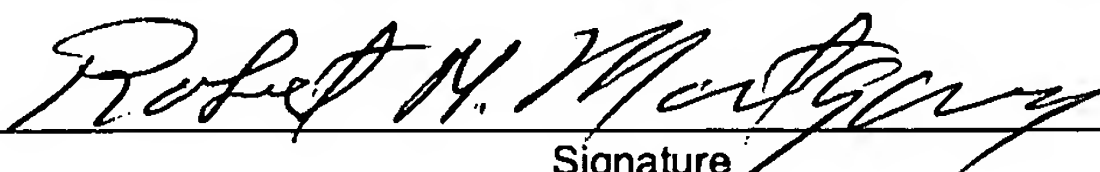
Robert N. Montgomery  
Signature

Robert N. Montgomery  
Typed or printed name of person signing certificate

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED  
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

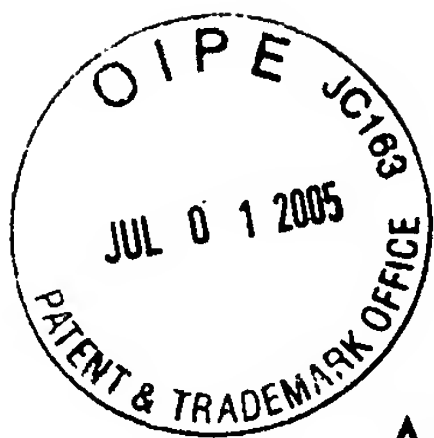
NOTE: The following showing of the cause of unavoidable delay must be signed by all applicants or by any other party who is presenting statements concerning the cause of delay.

|  |                                    |
|--|------------------------------------|
|  | <u>7-1-2005</u>                    |
| Signature  | Date                               |
| Robert N. Montgomery   | 35,291                             |
| Typed or printed name  | Registration Number, if applicable |

(In the space provided below, please explain in detail the reasons for the delay in filing a proper reply.)

Please see attached Petition for the reasons for the delay.

*(Please attach additional sheets if additional space is needed.)*



**PETITION TO REVIVE UNAVOIDABLY ABANDONED  
APPLICATION FOR PATENT PURSUANT TO 37 C.F.R. 1.137(a)**

In the United States Patent and Trademark Office

In re Application of: Kyle Broussard

Serial No. 10/662487

Group Art Unit: 3617

Filed: 9/15/2003

Examiner: Wright, Andrew

For: Method and apparatus for Air-cooled Outboard Motor for Small

Marine Craft

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Commissioner of Patents and Trademarks  
P.O. Box 1450 Alexandria, VA 22313-1450

**Petition for Revival of Unavoidably Abandoned  
Application for Patent**

Dear Sir:

Applicant hereby petitions the Commissioner for revival of the above-identified application for patent.

The last communication received from the Patent and Trademark Office in this application was mailed on 6/20/2005.

Applicant filed a first amendment on 8/20/2004 to a non-final office action dated 7/28/2004, a period of less than 30 days leaving more than two months available time in the shortened statutory period of three months. The amendment was subsequently determined not to be in compliance with Rule 37 CFR 121. However, the examiner failed to notify applicant, either by phone or in writing, of the discrepancy until 11/10/2004 well beyond the 3 months statutory period for response. However, applicant was granted a new 30 day shortened statutory period for response. Applicant filed a response 11/15/2005 addressing examiner's comments which indicated that each claim's status was required and that claims 1, 14, and 15 were non-compliant with the rule. See attached office action, there were no other discrepancies mentioned in this office action. The response was made in

a bona fide good faith attempt to comply with the rule as indicated by the examiner. However, the examiner or office staff failed to notify applicant by phone as required by Rule 714.03 as copied below:

**“Where there is sufficient time remaining in the period for reply (including extensions under 37 CFR 1.136(a)), the applicant may simply be notified that the omission *must* be supplied within the remaining time period for reply. This notification should be made, if possible, by telephone, and, When such notification is made by telephone, an interview summary record (see MPEP § 713.04) must be completed and entered into the file of the application to provide a record of such notification. When notification by telephone is not possible, the applicant *must* be notified in an Office communication that the omission must be supplied within the remaining time period for reply. For example, when an amendment is filed shortly after an Office action has been mailed, and it is apparent that the amendment was not filed in reply to such Office action, the examiner need only notify the applicant (preferably by telephone) that a reply responsive to the Office action must be supplied within the remaining time period for reply to such Office action.”**

There was no reason why applicant could not have been notified by phone or by written communication within the 3-month shortened statutory period. A brief explanation could have resulted in a faxed copy to the examiner with the necessary corrections to the minor rule discrepancies.

The 11/15/2004 response was again subsequently determined not to be in compliance with Rule 37 CFR 121 and again the examiner or office staff failed to notify applicant by phone as required by Rule 714.03, as copied above, within the six month statutory time period expiring 1/28/2005. Instead the examiner or staff waited until 3/4/2005 to notify applicant that the amendment was still not compliant with rule CFR 121. No specifics as to the discrepancy was provided in this office action and the notice only indicated that since no time was left to respond that the application would be abandoned unless a proper response was made. Since no new time period was set in this office action or indication of the running time period it was assumed that a six month period under rule 1.134 was automatically being set. It was also assumed that perhaps the 11/15/2004 response was not acted on until after the 30 day response period and that an extension of time was all that was needed to correct the problem however it was unclear as to how much time was needed. Therefore, a request for a one month extension of time was submitted. It was still assumed that the 11/15/ 2004 response had corrected the discrepancies

Applicant received a notice of abandonment dated 6/20/2005. As soon as applicant became aware of the abandonment of this application, immediate steps were taken to determine the reasons therefore by contacting the examiner by phone after several tries on 6/30/2005, and to have the application revived by way of the instant petition. Examiner offered no excuse for why applicant was not notified by phone of the discrepancies within the time allocated for response and further considered such communications to be simply a courtesy and thus not required. Applicant raised the question that since *bona fide* responses we attempted in each instance and in a timely manner that perhaps the examiner would

consider a Holding based on Insufficiency of reply Under Rule 711.03(a). However, examiner took the opinion that this rule only applies if he makes a mistake. Since he was unaware of this rule, obviously he has never made a mistake.

It has now been determined that another error accrued with the inadvertent submission of the 8/20/ 2004 amendment instead of the corrected amendment filed on 11/15/2004 which should have triggered an immediate response by the office.

In any case, applicant contends that since errors were made by both the applicant by failure to fully conform to the rule and the PTO in its failure to prosecute or communicate with applicant or agent in a timely manner, the holding of abandonment should be set aside or held to be unavoidably abandoned and continued prosecution be directed without predigest. The non-compliance discrepancies are minor and could have been corrected within minutes. The inventor certainly should not be punished due to prosecution delays by the PTO based on procedural matters or for errors by his agent in matters not relating to the merits of the case . This application is expected to go to litigation upon issuance and such delays have already become costly.

It is certainly understood that the rules must be upheld. However, since the statutes clearly dictate that every consideration should be given to an applicant whenever possible, it would seem that, in this case at least, the rules relating to applicant communication were not upheld, confusion reigned and very little curtesy was shown. Examiner was quick to point out that the grant of the new 30 day period for response was not mandatory and considered to be a curtesy. However, failure of the office to promptly respond seems just as important and costly as applicant's need to promptly respond to the office. Examiner seems unaware of the requirement to at least attempt to contact applicant by phone in order to expedite the case.

In any case its very difficult to prosecute an application on its merits, without risking abandonment for tripping over minor rule errors. In this case the use of the terms "currently amended" verses "amended" in a first and only amendment or the need to put each heading on separate pages are or should be treated as oversights and are not detrimental to the prosecution of the case.

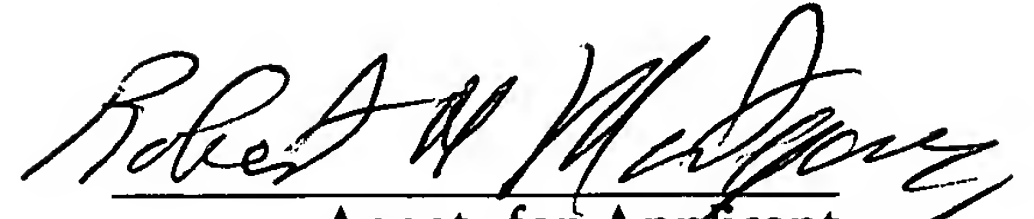
A copy of all office actions and responses as well as a new corrected amendment believed to comply with all aspects of 1.121 is attached.

Steps have been taken to insure that a thorough review and analyzes of all office actions are taken in the future by this office and It is hopeful that such oversights on applicant's part will not occur again.

Applicant's petition is accompanied by the required petition fee (37 C.F.R. § 1.17(I)) and A copy of all office actions and responses as well as a new corrected amendment believed to comply with all aspects of 1.121 is attached.

Respectfully submitted,

Date: 7-1-2005

A handwritten signature in black ink, appearing to read "Robert N. Montgomery", written over a horizontal line.

Agent for Applicant  
Robert N. Montgomery Reg. No. 35,291  
109 Brownlee Ave.  
Broussard, La. 70518  
Phone 337-837-4042  
Fax 337-837-5552



**In the United States Patent and Trademark Office**

**In re Application of: Kyle Broussard**

**Serial No. 10/662487**

**Group Art Unit: 3617**

**Filed: 9/15/2003**

**Examiner: Wright, Andrew**

**For: Method and apparatus for Air-cooled Outboard Motor for Small  
Marine Craft**

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**Commissioner of Patents and Trademarks  
P.O. Box 1450 Alexandria, VA 22313-1450**

**DECLARATION OF Robert N. Montgomery**

**Dear Sir:**

**I, Robert N. Montgomery, declares as follows:**

- 1. I am a registered patent Agent, Registration No. 35,291.**
- 2. I am the sole Agent in the firm of Southern Technology Development, 109 Brownlee Ave., Broussard Louisiana 70518.**
- 3. I am responsible for the prosecution of the above-identified United States Patent Application.**
- 4. The abandonment of this case first came to my attention on 6/20/2005, upon receipt of a letter mailed by the Patent and Trademark Office.**
- 5. Upon receipt of the 6/20/2005 letter from the Patent and Trademark Office, I immediately looked into this situation and found that no response was ever received from the Patent and Trademark Office to the response mailed on 3/7/2005. I also found, that my file for this patent application shows no phone calls from the PTO during the statutory periods or subsequent non-statutory periods and that discrepancies relating to rule 1.121 had resulted in abandonment even though responses were made to each and every office action.**



Such responses were subsequently found to be not fully responsive due to rule informalities

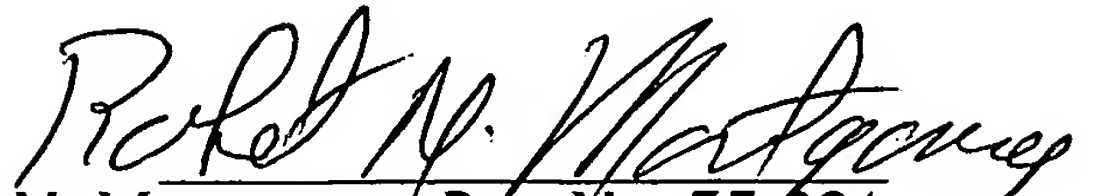
6. I then made contact with the PTO examiner by phone to review his file in order to determine what discrepancies still remained for this application. It was determined that a corrected copy of the amendment complying with rule 1.121 was not included in the response of 3/7/2005 and a duplicate copy of the amendment filed 8/20/2004 was filed on 11/15/2004 in place of the corrected amended amendment placed in my file.
7. I did not received a phone call or written communication from the Patent and Trademark Office within the statutory periods that clearly explained why the response made on 11/15/2004 was not fully responsive or what was required to bring the amendment into compliance within the new time period set in the office action 3/4/2005, Since the notice of 3/4/2005 was past the 6<sup>th</sup> month statutory period for response it was undetermined if extensions of time were required or how mush time was needed .
8. If I had been properly informed by the PTO within the first shortened statutory period or after the 30 day extension period of the fact that the amendment was not responsive and made aware of what was required to make the amendment fully responsive I could have replied within minutes by fax.
9. I have no knowledge as to how the uncorrected copy of the amendment was filed in place of the corrected one unless it was assumed by my staff that both copies were the same and one was intended for filing in the PTO and the other intended for my file.
10. In order to avoid repetition of the events which took place in this case so that a similar error will not be made in the future, I have instituted a new procedure, which requires our file clerk to refrain from filing any patent amendment or PTO response until the following checks have been made:
  - (a) verify that each item of the PTO notice is fully noted in the response;
  - (b) that the response is being made with the statutory time period or appropriate extensions of time are requested; and
  - (c) if the notice was not received within the statutory period remind the agent that a phone conversation with the examiner should be initiated to review each and every aspect of the response being made prior to filing .
11. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any

patent issuing thereon.

Date:

7-1-2005

Respectfully submitted,



Robert N. Montgomery Reg. No. 35,291

109 Brownlee Ave.

Broussard, La. 70518

Phone 337-837-4042

Fax 337-837-5552



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/662,487      | 09/15/2003  | Kyle Broussard       | 20030829            | 9214             |

31346 7590 06/20/2005

ROBERT N. MONTGOMERY  
109 BROWNLEE AVE.  
BROUSSARD, LA 70518-3021

EXAMINER

WRIGHT, ANDREW D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 3617     |              |

DATE MAILED: 06/20/2005



Please find below and/or attached an Office communication concerning this application or proceeding.

# Notice of Abandonment

Application No.

10/662,487

Applicant(s)

BROUSSARD, KYLE

Examiner

Art Unit

Andrew Wright

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 10 November 2004.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection. (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☒ A reply was received on 15 November 2004 but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$\_\_\_\_\_ is insufficient. A balance of \$\_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$\_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$\_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

The reply received on 11/15/04 was not in compliance with 37 CFR 1.121 for the following reasons: the claims listing did not have the correct status identifiers (37 CFR 1.121(c)) and the amendment sections did not begin on separate pages (37 CFR 1.121(h)). Applicant was notified that the 11/15/04 response was non-compliant in a letter mailed on 3/4/05.

ANDREW D. WRIGHT  
PRIMARY EXAMINER

6/13/05

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE,**

**DATE: 11/15/2004**

**APPLICANT: Kyle Broussard**

**SERIAL NO. 10/662, 487**

**GROUP ART UNIT: 3617**

**FILED: 9/15/2003**

**EXAMINER: Wright, Andrew**

**FOR: Method and apparatus for Air-cooled Outboard Motor for Small Marine Craft.**

**The Honorable Commissioner of Patents & Trademarks  
P.O. Box 1450 Alexandria, VA 22313-1450**

**AMENDMENT**

**In response to the office action mailed 11/10/2004, please amend the above-identified application as follows:**

## IN THE SPECIFICATION

Please amend the specification as follows:

As first seen in **Fig. 1** the belt drive, air cooled outboard engine assembly **10** is mounted to a small flat bottom boat **12** in the conventional manner on the hull's center line as seen in **Fig. 2**. As may be seen in **Fig. 3** the engine assembly **10** is steerable and throttle operated in much the same manner as a water-cooled outboard engine. The air-cooled engine **14** is vertically mounted with a horizontal shaft **16** seen in **Fig. 7** and is structurally supported and enclosed in a cowling **18** having adequate ventilation louvers to allow for engine cooling as illustrated in **Fig. 4**. However, in some cases the cowling may be removed for greater cooling capability. The engine assembly **10** is pivotal in a kick-up position in the horizontal plane as well as the vertical plane in the typical outboard mounting arrangement as illustrated in **Fig. 5**. The engine belt drive assembly **10** to which the air-cooled utility engine is closely attached is enclosed in a water tight housing **22** seen in **Fig. 6** and exposed in **Fig. 7**. The housing is fitted with a removable cover **24**. The drive housing **22** is adjustable attached to the transom in a manner whereby the drive housing extends only to a point approximately flush with the keel or bottom of the boat as seen in **Fig. 4**. The drive housing **22** further houses the lower propeller shaft assembly **26**, and includes the output propeller shaft **28**, its timing belt type driven pulley **30** and shaft support bearings **48**, shown in **Fig. 9**, a timing belt type drive pulley **32** and timing belt **34** as seen in **Fig. 7**. A propeller **36** seen in **Fig. 6** designed generally used specifically for mud and marsh operation is fitted to the drive shaft **28** and secured thereto in the usual manner by key or pin, threaded nut **38** and retainers.



## IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended ) ~~A transom mounted, air cooled drive system for shallow draft marine watercraft comprising a vertical drive housing having an upper and a lower end and means for closely attaching an air cooled engine perpendicularly to said drive housing, said engine having an output shaft located within said drive housing, a propeller shaft assembly attached to said lower end of said vertical housing opposite said air cooled engine and extending outwardly, a pivotal transom mounting bracket located intermediate said vertical housing, and belt drive means located within said vertical drive housing connecting said air cooled engine and said propeller shaft assembly.~~

A portable drive assembly having means for temporary attachment to the transom of a shallow draft watercraft said portable drive assembly comprising an elongated drive housing enclosing an upper drive assembly a lower driven assembly and a timing belt connecting said upper drive assembly to said lower driven assembly, an engine mounting plate attached externally to said drive housing located adjacent said upper drive assembly perpendicular to said drive housing said lower driven assembly further comprising a propeller shaft partially enclosed within a shaft housing attached to said drive housing adjacent said driven assembly extending a least 12 inches beyond said drive housing and a propeller attached to said propeller shaft.

2. (Currently Amended ) The portable drive assembly ~~transom mounted, air cooled drive system~~ according to claim 1 wherein said portable drive assembly system further



- comprising a transmission mounted to said engine mounting plate coupled externally to said upper drive assembly for reversing drive rotation.
3. (Currently Amended ) The portable drive assembly ~~transom-mounted, air-cooled drive system~~ according to claim 1 wherein said drive system further comprises steering and throttle controls.
4. (Currently Amended ) The portable drive assembly ~~transom-mounted, air-cooled drive system~~ according to claim 1 wherein said propeller shaft assembly further comprises a shaft housing having a vertical triangular fin located below said shaft housing, a shaft supported adjacent each end by thrust bearings in a manner whereby said shaft extends beyond each of said thrust bearings and a plurality of internal seals located along said shaft outboard of said thrust bearings.
5. (Currently Amended ) The portable drive assembly ~~transom-mounted, air-cooled drive system~~ according to claim 1 wherein said belt upper drive assembly and said lower driven assembly ~~drive means~~ comprises at least two timing belt type pulleys and a timing belt further include timing pulleys compatible with said timing belt ~~said belt~~ being rotationally unobstructed or acted upon by other bodies.
6. (Currently Amended ) A portable outboard engine and drive assembly having means for temporary attachment to the transom of a shallow draft watercraft ~~transom-mounted, air-cooled drive system for shallow draft marine watercraft~~ comprising:
- a) a sealed housing containing a timing belt drive assembly ~~having~~ comprising an upper drive pulley assembly and -a lower driven pulley assembly;
  - b) an engine mounting plate attached externally to said sealed housing located adjacent said upper drive pulley assembly perpendicular to said sealed

housing;

c) a propeller shaft partially enclosed within a shaft housing attached to said sealed housing extending from said driven pulley assembly a least 12 inches beyond said sealed housing;

d) a propeller attached to said propeller shaft;

~~—b~~ e) a pivotal means for temporarily attaching said ~~belt drive~~ sealed drive housing to a boat transom; and

~~e~~ f) an air cooled engine ~~attached~~ mounted to said housing engine-mounting plate and ~~connected~~ coupled externally to said upper drive pulley assembly; and.

~~d) a propeller shaft assembly attached to said housing and connected to said lower driven pulley extending outwardly from said housing opposite said air-cooled motor.~~

7. (Canceled) ~~The transom mounted, air-cooled drive system according to claim 6 wherein said belt drive assembly further comprises a belt.~~

8. (Currently Amended ) ~~The portable drive assembly transom mounted, air-cooled drive system according to claim 6 wherein said pivotal means comprises both horizontal and vertical pivoting means.~~

9. (Currently Amended ) ~~The portable drive assembly transom mounted, air-cooled drive system according to claim 6 wherein said portable drive assembly air-cooled drive system further comprises a transmission connected between said air-cooled engine and said upper drive pulley assembly.~~

10. (Currently Amended ) ~~The portable drive assembly transom mounted, air-cooled drive~~

~~system according to claim 6 wherein said propeller shaft assembly further comprises a shaft housing, a propeller shaft supported within said shaft housing by a plurality of thrust bearings and sealed seals at each end of said shaft housing with a plurality of shaft seals.~~

11. ~~(Currently Amended )~~ The portable drive assembly transom-mounted, air-cooled drive system according to claim 6 wherein said propeller shaft assembly is in access of 18 inches in length.

12. ~~(Currently Amended )~~ The portable drive assembly transom-mounted, air-cooled drive system according to claim 10 wherein said propeller shaft assembly further comprises a rudder fin extending below said shaft housing.

13. ~~(Currently Amended )~~ A method of driving a small watercraft in very shallow water comprising the steps of:

a) attaching a portable drive assembly having means for temporary attachment to the transom of a shallow draft watercraft said portable drive assembly comprising an elongated drive housing enclosing an upper drive assembly, a lower driven assembly and a timing belt connecting said upper drive assembly to said lower driven assembly, an engine mounting plate attached externally to said drive housing located adjacent said upper drive assembly perpendicular to said drive housing, said lower driven assembly further comprising a propeller shaft partially enclosed within a shaft housing attached to said drive housing adjacent said driven assembly extending a least 12 inches beyond said drive housing, and a propeller attached to said propeller shaft.

~~a) attaching an air-cooled drive system comprising a vertical drive housing having an~~

~~upper and a lower end and means for closely attaching an air cooled engine perpendicularly to said drive housing said engine having an output shaft located within said drive housing, a propeller shaft assembly attached to said lower end of said vertical housing opposite said air cooled engine and extending outwardly, a pivotal transom mounting bracket located intermediate said vertical housing, and belt drive means located within said vertical drive housing connecting said air cooled engine and said propeller shaft assembly; and~~

- b) attaching an air cooled utility engine to said engine mounting plate and coupling said air cooled utility engine to said upper drive assembly; and
- c) adjusting said pivotal transom mounting bracket relative to said transom in a manner whereby said propeller shaft assembly does not extend below the bottom of said watercraft when driving said watercraft.

- 14. (New) The portable drive assembly according to claim 1 further comprising a self contained air cooled utility engine having a horizontal output shaft attached to said engine mounting plate said output shaft coupled to said upper drive assembly.
- 15. (New) The portable drive assembly according to claim 14 wherein said drive housing is water sealed.

## REMARKS

Reconsideration of this application is requested.

### **In the specification :**

The addition of the word "utility" is not considered new matter and is meant to clear up any misunderstanding regarding the type of engines referred to in the specification. Antecedence can be found in the drawings and descriptions identifying the types of engines used in the prior art for portable outboard engines currently used for mud boat or shallow draft watercraft and described herein as being light weight, relatively low horsepower, and the like.

*Claims 1-3, 5-9, 12, and 13: are rejected under 35 U.S.C. 103(a) as being unpatentable over Stojkov et al. (US 5,178,566) in view of Hasl et al. (US 6,468,120). Stojkov discloses a vertical drive housing (12). Housing (12) has upper and lower ends (figure 1B). Drive shaft (14) and universal joint (161) are a means for attaching engine (13) perpendicularly to the housing. Engine (13) has an output shaft (162) located within the housing. Propeller shaft (261) is attached to the lower end of the housing on an opposite side of the housing from the engine. Mounting structure (80) comprises bracket (81) which constitutes a pivotal transom mounting bracket located intermediate the housing (12) and the transom. The mounting structure allows for both tilt and steering pivotal movement of the housing (12). Belt (37) is within the housing (12) and connects the engine to the propeller shaft. Stojkov discloses a water cooled engine. Hasl discloses a marine propulsion unit with an inboard engine and an outdrive, similar to that of Stojkov. Hasl teaches that the engine can be cooled using an air cooling system, an open loop water cooling system, or a closed loop water cooling system. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Stojkov by replacing the water cooling system with an air cooling system. The motivation would be to reduce the size, weight, and complexity of the engine.*

In response: Claim 1 has been Currently Amended to claim only a drive assembly having means for temporary attachment to a boat transom, the drive assembly further comprising an engine mounting plate but no engine. Since both of the cited references of Stojkov and Hasl are out drives that are fixed to a boat transom and do not include engine mounting plate. The cited references do not teach or otherwise suggest the invention as Currently Amended . It should be noted that there is a distinct difference between the terms



attaching, mounting, connecting or coupling and are certainly not interchangeable. Coupling an engine to a drive unit by a universal joint is far different from mounting and engine directly to a drive assembly.

A portable drive assembly having means for temporary attachment to the transom of a shallow draft watercraft said portable drive assembly comprising an elongated drive housing enclosing an upper drive assembly a lower driven assembly and a timing belt connecting said upper drive assembly to said lower driven assembly, an engine mounting plate attached externally to said drive housing located adjacent said upper drive assembly perpendicular to said drive housing said lower driven assembly further comprising a propeller shaft partially enclosed within a shaft housing attached to said drive housing adjacent said driven assembly extending a least 12 inches beyond said drive housing and a propeller attached to said propeller shaft.

*Claim 2, Stojkov shows a transmission (17) for reversing drive rotation.*

Response:

Claim 2 as Currently Amended herein claims a transmission mounted to said engine-mounting plate coupled externally to said upper drive assembly for reversing drive rotation. The cited reference of Stojkov calls for a transmission connected to a clutch and an engine.

The instant claim is limited to the transmission being mount to the engine mounting plate and coupled to the upper drive assembly not to a clutch or an engine. Stojkov does not teach or suggest the mounting of the transmission. In fact, the Stojkov transmission is connected to the upper drive assembly via clutch and universal joints not necessary in the instant invention. By Reading Stojkov it would have been unobvious to leave these elements out of the drive train or to provide an engine mounting plate fixed to the drive assembly for mounting an engine.

*Claim 3, Stojkov shows steering controls (22). Stojkov does not specifically show throttle controls. However, it is well known and common to provide throttle controls such that the operator can control the output of the engine and therefore the speed of the boat. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Stojkov by providing a throttle control. The motivation would be to allow the operator can control the output of the engine and therefore the speed of the boat.*

Response:

Where is may be obvious to some skilled within the art to provide speed and steering controls to an engine is quite unobvious to provide such controls for a drive assembly

without an engine according to Claim 3 which is dependent on claim 1. Providing such steering and speed controls for a temporary drive with no engine is even more unobvious. Not knowing what engine will be used or what kind of watercraft the drive assembly will be use on is far from obvious.

***Claim 5, Stojkov shows an upper pulley, a lower pulley, and a belt. Stojkov in view of Hasl as described above with respect to claims 1-3 and 5 contains all of the limitations of claims 6-9 and 12.***

Response to claim 5: as Currently Amended distinguishes over the prior art in that the timing belt of claim 1 is cooperative with timing pulleys and the belt is unobstructed by the housing walls etc and has not rollers or tensioner wheels etc.

Response regarding claims 6-12 as Currently Amended claims a portable outboard engine and drive assembly having an external engine mounting plate and an air-cooled utility engine mounted thereto coupled externally to the upper drive pulley assembly. The cited references of either Stojkov or Hasl both being out drives depending on inboard engines and not outboard engine and drive assemblies for temporary mounting to shallow draft watercraft do not suggest or teach the claimed invention. One of ordinary skill reading the cited references could not have envisioned the claimed invention since they teach away from the invention by requiring far more elements than are needed for the instant invention.

***Regarding claim 13, Stojkov in view of Hasl does not specifically disclose the recited method steps. The steps, however, are inherent in the making and use of the modified invention of Stojkov. Stojkov discloses that the outdrive can be tilted up to a position where it is not below the bottom of the boat. Stojkov also discloses that the outdrive can kick-up to such a position in response to striking an object in the water. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to devise the recited method steps. The motivation would be to make and use the modified invention of Stojkov.***

Response regarding Claim 13.

Examiner's recitation regarding the tilting and kick-up properties of the cited references is an erroneous interpretation of the adjustability of the outboard engine and drive assembly especially as now Currently Amended . The claim clearly defines the adjustment of the drive relative to the transom in a manner whereby the propeller shaft is positioned above the bottom of the watercraft Currently Amended to include the limitation of "when driving the watercraft". It would seem obvious that all such drives have tilt and kick-up capability. However, as originally claimed it seems equally obvious that the adjustment as claimed was meant to be adjusted so that the propeller shaft was adjusted in a manner



whereby it was not allowed to extended blow the bottom of the watercraft. A Positive limitation of a claim seems better than a negative limitation. There is any number of things such an adjustment dose not do.

*Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stojkov in view of Hasl as applied to claims 1 and 6 above, and further in view of Foreman (US 6,302,750). Stojkov shows a propeller shaft housing (246, 247). Stojkov shows a propeller shaft (261) that is supported at the ends of the housing and extends outward of either end of the housing. Stojkov shows thrust bearings (244, 245) that support the shaft (see figure 13). Stojkov shows a skeg (280). Stojkov does not show that the skeg is triangular. Stojkov does not disclose seals. Skegs come in various shapes and sizes. Foreman shows a triangular seal. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Stojkov by using a triangular skeg instead. The motivation would be to reduce the weight of the outdrive by using less material in the skeg (280) by removing the portion behind the angled portion (figure 1 B). Furthermore, it is well known and common to use seals is a propeller shaft housing to prevent water from harming the bearings. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Stojkov by using seals around the bearings (244, 245). The motivation would be to prevent water from harming the bearings.*

Response regarding claim 4 and 10: As Currently Amended claim 4 is novel and distinguishes over the cited reference of *Stojkov* in that *Stojkov* does not disclose thrust bearing as suggest by examiner. The shaft bearings shown as items 244 and 245 are simply ball bearings. Thrust bearings are tapered roller bearings designed to take extreme thrust loads as disclosed in applicant's specification. When the propeller shaft of the instant invention is buried in mud the full torque of the drive and the weight of the boat is applied to the shaft and its bearings in both forward and reverse direction with out any slippage as opposed to the propeller being in water. The cited reference of *Stojkov* uses two halves to comprise the shaft housing which is also an integral part of the drive housing. The instant invention as claimed has a shaft housing attached externally to the drive housing and extends at least 12 inches beyond the drive housing. The absence of these limitations as well as others in the teachings of cited reference make the instant claim 4 unobvious.

The *skeg* in the cited reference of *Stojkov* is an integral part of the drive housing enclosing the drive and propeller shaft and does not teach or suggest the use a drive shaft assembly externally attached to a sealed drive housing or that a triangle shaped fin should be mounted to such a shaft housing. The shape of the fin is a limitation as is its location and cannot be ignored. Anyone of ordinary skill within the art reading the cited reference of *Stojkov* would assume that such a Skeg would need to be placed directly under the drive assembly and that the drive shaft assembly should be and integral part of the drive assembly. It takes imagination beyond that of a skilled worked to redesign a drive leaving

out 50% of the components and rearranging nearly every thing else. This is assuming that one reading the reference has a need to do so. Only in hind sight could anyone make such changes since the reference does not suggest the need for an outboard motor and drive assembly that is located above the bottom of the hull for use in driving a shallow watercraft in very little or no water.

*Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stojkov in view of Hasl as applied to claim 6 above, and further in view of Meisenburg et al (US 5,415,576). Stojkov does not disclose the length of the propeller shaft assembly. Meisenburg shows an outdrive similar to that of Stojkov. Meisenburg discloses that the distance from the propeller shaft (156) to the input shaft (28) is about 8 to 15 inches. It can be seen from figure 2 of Meisenburg that the length of the propeller shaft assembly, from the front edge of the housing (198) to the back end at nut (180) is substantially longer than the distance between shaft (156) and shaft (28). Using figure 2 of Meisenburg as a starting point, it would be within the range of routine experimentation to make a propeller shaft assembly that is at least 18 inches long. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Stojkov by making the propeller shaft assembly at least 18 inches long.*

*The motivation would be to optimize design parameters such as size and weight by starting with a known size suggested by Meisenburg.*

Response regarding claim 11: First of all the cited reference of Meisenburg is A portable outboard engine and drive assembly having means for temporary attachment to the transom of a shallow draft watercraft. The Meisenburg apparatus is a surface outdrive assembly that is gear driven, and does not teach or otherwise suggest a propeller shaft externally attached to a drive unit having a engine mount thereto or that the purpose of the extended shaft is to

insure propulsion of a shallow watercraft when the craft is incapable of planing. In fact, the Meisenburg drive shaft is extended for the purpose of attaching counter-rotating propellers. The length of the driven shaft of Meisenburg is not disclosed and an extrapolation based on relationships between shafts shown in a drawing are simply not an excepted practice. Meisenburg does not teach or suggest the need to extend the shaft for some distance to enhance the ability of the boats propulsion when then the craft is no level. The length of the shaft in the instant claim is measured from the sealed drive housing to which the shaft housing is attached and not measure from the front of a housing as described by examiner, nor is a relationship establish between the drive shaft assembly and the driven shaft assemble and the length of the driven shaft claimed,

The courts have ruled repeatedly that the cited reference must teach or suggest the instant claim and the claim limitations may not be negated.

It seems that the examiner in this case is again using hindsight in an attempt to concoct a relationship that will support his conclusion of an obvious limitation for the length of the

driven shaft. The length of the driven shaft in the instant application is derived by the desired speed, weight and size of the watercraft and not a function of having multiple propellers.

Conclusion

*The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pignata ('763, provided by applicant) and Brandt ('866) both show the equivalence of an outboard motor and an inboard-outdrive assembly for a belt driven propulsion.*

Inasmuch as each of the rejections have been overcome by the amendment to the claims and through arguments relating thereto, and all of the examiner's suggestions and requirements have been satisfied, it is respectfully requested that the rejections be withdrawn and that this application be passed to issue.

Should the examiner feel that a telephone conference would advance this application, she is encouraged to contact the undersigned at the telephone number listed below.

Please contact the submitter if any fees are due.

Respectfully submitted,



Robert N. Montgomery, Reg. No. 35,291

Date: 11/15/2004

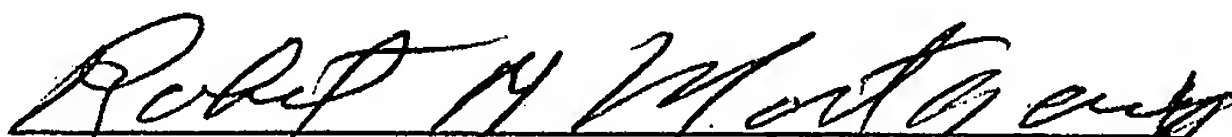
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal service as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450 Alexandria, VA 22313-1450 on 11-15- 2004.



Robert N. Montgomery,